IFW AF/3624
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	)	
Klaus Doelle, et al.	)	Group: 3624
Serial No.: 09/510,651	)	
Filed: February 22, 2000	)	
Title: STOCK PREPARATION MONITORING SYSTEM AND METHOD OF SAME	)	Examiner: Akers, Geoffrey R.

LETTER

MS Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed herewith, in triplicate, is the Brief of Appellant in the above-identified patent application. The $330.00 fee is enclosed.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petitions therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Respectfully submitted,

Todd T. Taylor
Registration No. 36,945

Attorney for Applicant

TTT/ar

TAYLOR & AUST, P.C.
142 S. Main Street
P.O. Box 560
Avilla, IN 46710
Telephone: 219-897-3400
Facsimile: 219-897-9300

Encs.: Postcard
Check No. 12140

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: September 16, 2004.

TODD T. TAYLOR, Reg No. 36,945
NAME OF REGISTERED REPRESENTATIVE

SIGNATURE

September 16, 2004
DATE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	)	
Klaus Doelle, et al.	)	Group: 3624
Serial No.: 09/510,651	)	
Filed: February 22, 2000	)	
Title: STOCK PREPARATION MONITORING SYSTEM AND METHOD OF SAME	)	Examiner: Akers, Geoffrey R.

BRIEF OF APPELLANT

Ms Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This appeal is taken from the decision of the Examiner, dated April 19, 2004, finally rejecting Claims 1-19, all of the claims that are under consideration in the above-captioned patent application. Appellants timely mailed a Notice of Appeal in this matter on July 16, 2004.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is Voith Paper Patent GmbH, a corporation organized and existing under the laws of the Federal Republic of Germany, which owns the entire interest in this patent application as set forth in the underlying claimed invention.

II. RELATED APPEALS AND INTERFERENCES

No related Appeals or Interferences are known to the Appellants.

III. STATUS OF CLAIMS

Pending: 1-19.

Canceled: None.

Allowed: None.

Objected To: None.

Rejected: 1-19.

Withdrawn from Consideration: None.

On Appeal: 1-19.

A copy of claims 1-19, all the claims under appeal, is attached as an Appendix to this brief.

IV. STATUS OF AMENDMENTS

No amendment was filed in this case subsequent to the final rejection.

V. SUMMARY OF INVENTION

The present invention relates to a system for monitoring a stock preparation apparatus wear part and transmitting information relevant to the condition of the part to a remote location for further action there on.

Referring now to Fig 1 and pages 4-7 of the Application, preparation monitoring system 10 includes a stock preparation apparatus 12, sensor 14, transmitter 16 and remote unit 18 located at a remote customer site; and a base unit 20 located at a distant manufacturing or analysis site. In the embodiment shown, stock preparation apparatus 12 is a screen apparatus with a wear part in the form of a screen. Sensor 14 is coupled with and configured for sensing a physical parameter associated with stock preparation apparatus 12. In the embodiment shown,

sensor 14 is an ultrasound transceiver that transmits ultrasound waves against the screen and receives the reflected ultrasound waves to determine a physical parameter associated with stock preparation apparatus 12. For example, the size of the holes and/or a change in the size of the holes within stock preparation apparatus 12 may be determined using ultrasound transceiver 14. (Page 4, line 6 through page 5, line 2.)

Sensor 14 includes a transmitter 16 which transmits an air-borne wireless output signal corresponding to the physical parameter sensed by sensor 14. Transmitter 16 may be integral with sensor 14, or may be mechanically and/or electrically coupled with sensor 14, as indicated by line 22. Other types of sensors are also possible. For example, stock preparation apparatus 12 may include a wear part in the form of a rotatable element such as an auger, roll, etc. carried by a plurality of reduced friction bearings. Sensor 14 may be configured to sense the amplitude and/or frequency of vibrations associated with a bearing carrying the rotatable element. Other types of sensors are also possible, depending upon the specific physical parameter associated with an element within stock preparation apparatus 12 which is to be sensed. (Page 5, lines 3-13.)

Remote unit 18 is located at the customer site and has a receiver 24 that receives one or more air-borne wireless output signals transmitted from transmitter 16. In the embodiment shown, transmitter 16 transmits a radio frequency (RF) signal that is received at receiver 24. The RF signal may be utilized as a carrier for carrying digital data signals thereon. Receiver 24 includes appropriate circuitry configured for separating the data from the carrier signal. The data signals may include, e.g., an identification code to identify a particular sensor 14 or transmitter 16 from which the wireless output signal is transmitted. Other types of wireless links such as an infrared (IR) link may also be used. (Page 5, lines 14-21.)

By providing a wireless link between transmitter 16 and remote unit 18, it is unnecessary to hardwire remote unit 18 with stock preparation apparatus 12. Thus, sensor 14 and transmitter 16 may be installed on an already existing stock preparation apparatus 12 for retrofit applications.

Remote unit 18 includes a data link 26 for transmitting a remote output signal corresponding to the wireless output signal received from transmitter 16. In the embodiment shown, data link 26 is in the form of a modem configured to transmit digital data via a telephone line connection. Other types of data links, such as a fiber optic connection, etc., are also possible. (Page 6, lines 5-9.)

Base unit 20 is disposed at a location remote from stock preparation apparatus 12. Base unit 20 includes a data link 28 coupled with data link 26 via communication line 30. In the embodiment shown, data link 28 is in the form of a modem coupled either directly with modem 26 or indirectly through an internet connection. Base unit 20 includes appropriate electrical circuitry such as a microprocessor, memory, etc. to analyze the remote output signal received at modem 28 and provide feedback to the customer at the customer site where stock preparation apparatus 12 is located. Base unit 20 utilizes one or more remote output signals received at modem 28 to analyze the present state of a wear part within stock preparation apparatus 12 at the customer site. If sensor 14 is configured as an ultrasound transceiver as described above, an average value of a plurality of remote output signals received at modem 28 is calculated which corresponds to an average hole size of a plurality of holes in a screen within stock preparation apparatus 12. Since the average size of the holes tends to increase as the screen wears, the average value of the remote output signals received at modem 28 in turn corresponds to a wear state of the screen within stock preparation apparatus 12. (Page 6, lines 10-21.)

If the wear state of a wear part exceeds a threshold value (i.e., which may be stored within

a look-up table), base unit 20 transmits a feedback signal from modem 28 to modem 26 via communication line 30. The feedback signal may simply correspond to a wear state of a wear part within stock preparation apparatus 12. Alternatively, the feedback signal may be in the form of a wear state notification along with a price quote to the customer for a replacement part. Additionally, if the customer has previously authorized shipment of a replacement part upon detection of a worn part, the feedback signal may correspond to a notification to the customer that a worn part has been detected and a replacement part has already been shipped. (Page 7, lines 2-10.)

During use, sensor 14 and transmitter 16 are coupled or positioned in association with a wear part such as a screen within stock preparation apparatus 12. Transmitter 16 transmits one or more air-borne wireless output signals to receiver 24 within remote unit 18 at the customer site. Remote unit 18 is either continuously or intermittently connected with base unit 20 at a distant location via communication line 30 using modems 26 and 28. Remote unit 18 may either simply pass the data corresponding to the wireless output signal directly through to base unit 20, or may reformat the data to a type which is more readily useable by base unit 20. Base unit 20 analyzes one or more data signals received from remote unit 18 and establishes a wear state of a wear part within stock preparation apparatus 12. Depending upon the result of the analysis carried out by base unit 20, base unit 20 provides either no feedback to remote unit 18 or provides one or more feedback signals to remote unit 18. The feedback signals may represent, e.g., a wear state of the wear part within stock preparation apparatus 12, a price quote or a shipment notification. (Page 7, line 11 through page 8, line 2)

Referring now to Fig. 2, and page 8 of the application, another embodiment of a stock preparation monitoring system 40 is shown. Stock preparation monitoring system 40 is similar in many respects to stock preparation monitoring system 10 shown in Fig. 1. One difference is that

data links 26 and 28 are configured as internal modems integral with remote unit 42 and base unit 44, respectively. One other difference is that at least some of the functionality previously associated with base unit 20 shown in Fig. 1 is instead carried out within remote unit 42 shown in Fig. 2. More particularly, rather than transmitting a remote output signal from remote unit 42 to base unit 44 for remote analysis at base unit 44, data analysis occurs within remote unit 42 located at the customer site. If the data analysis results in a determination of a worn state of a wear part, it is only necessary to transmit the remote output signal to base unit 44 indicating the occurrence of such an event. Thus, the amount of data transmitted from remote unit 42 to base unit 44 is reduced. (Page 8, lines 3-18.)

VI. ISSUES

1. Whether Claims 1-19 are unpatentable under 35 U.S.C. § 103(a) as being obvious from the teachings of U.S. Patent No. 5,810,973 (Carlsmith) in view of the teachings of U.S. Patent No. 5,944,952 (Shackford).

2. Whether claims 1-19 are unpatentable under the judicially created doctrine of obviousness-type double patenting over claims 1-37 of U.S. Patent No. 6,267,847 (Doelle, et al.)

VII. GROUPING OF CLAIMS

Appellants submit that Claims 1-9 and 19 stand or fall together; and claims 10-18 stand or fall together. The groups are different in that Claims 1-9 and 19 recite specific apparatus in a stock preparation monitoring system, while claims 10-18 recite various steps for collecting, transmitting and processing data and information in a monitoring system.

VIII. ARGUMENT

1. CLAIMS 1-19 ARE PATENTABLE UNDER 35 U.S.C. §103(a).

In the Final Office Action dated April 19, 2004, Claims 1-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,810,973 (Carlsmith, et al.) in view of U.S. Patent No. 5,944,952 (Shackford, et al.). However, Appellants submit that Claims 1-19 are neither taught, disclosed nor suggested by the cited references and are therefore in condition for allowance.

Carlsmith, et al. teaches an apparatus for producing small particles from high consistency wood pulp. The disclosed apparatus is a pin mixer having a housing with a substantially smooth interior surface. Relief means is provided for limiting the buildup of high consistency pulp fiber accretions on the pin tips. The relief means is a relief chamber 26 formed in the interior surface of housing 12. A first portion of the interior surface of housing 12 defines a constant distance r1 from a central axis 27, and extends from a predetermined point B on the interior housing surface 25 clockwise as shown in the drawings, to a predetermined point A. The second interior portion defines a variable distance r2 from the predetermined A clockwise to the point B. The distance r2 is greater than r1. The relief chamber extends longitudinally the entire length of housing 12 (column 5, lines 40-60).

Shackford, et al. discloses a method for bleaching high consistency pulp with a gaseous bleaching reagent. The pulp is shredded and fluffed in the presence of a contacting gas, which includes the bleaching reagent. The pulp is retained in the contactor for a predetermined time sufficient to consume 75% to about 90% of a selected dose of the bleaching reagent sufficient to delignify high consistency pulp from an initial Kappa number to an intermediate Kappa number. The pulp and gas are separated in a separation chamber. The gas and pulp are then passed in a co-current relationship at different velocities to complete the desired delignification.

Appellants respectfully submit that even if combined, the disclosures of Carlsmith, et al and Shackford, et al fail to teach many of the elements recited in the independent claims, as discussed in detail below. The references teach discrete apparatuses, and do not teach monitoring systems linking two remote sites for the purpose of processing and responding to changes in operating conditions of a system or equipment.

A. CLAIMS 1-9 ARE PATENTABLE OVER CARLSMITH, ET AL. AND SHACKFORD, ET AL.

In contrast to the teachings of Carlsmith, et al and Shackford, et al. alone or in combination, claim 1 recites in part:

> **"a sensor . . . configured for sensing a physical parameter associated with said stock preparation apparatus, . . .including a wireless transmitter for transmitting an air-borne wireless output signal...;**
>
> **a remote unit including a receiver for receiving said wireless output signal, . . .including a first data link for transmitting a remote output signal...;**
>
> **a base unit including a second data link...coupled with said first data link for at least one of:**
>
> **analyzing said remote output signal;**
>
> **transmitting a state notification to said remote unit . . .;**
>
> **transmitting a price quote to said remote unit . . .; and**
>
> **transmitting a shipment notification to said remote unit . . .".**

Appellants submit that such an invention is neither taught, disclosed nor suggested by the cited references, alone or in combination, and has distinct advantages thereover.

Carlsmith, et al. discloses a pin mixer configured in such a way as to provide a relief means for limiting build up of fiber on the pin tips. Shackford, et al. discloses a bleaching process. While each discloses a specific apparatus useful in pulp preparation processes, neither

Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a sensor coupled with the stock preparation apparatus configured to sense a physical parameter of the apparatus, the sensor including a wireless transmitter for transmitting an air-borne wireless signal, as recited in claim 1.

Neither Carlsmith, et al., nor Shackford, et al., alone or in combination, teaches a remote unit including a receiver receiving a wireless signal from the sensor and a first data link for transmitting a remote output signal, as recited in claim 1.

Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a base unit including a second data link coupled with the remote unit and including means for analyzing the remote signal, transmitting a state notification to the remote unit, transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit, as recited in claim 1.

The present invention, as recited in originally filed claim 1, directly determines the state of a wear part in a stock preparation apparatus, transmits signals in regard thereto to a base unit remote from the apparatus and allows remote monitoring of the stock preparation apparatus. The system can then be easily retrofitted on to existing machinery in that the sensor and remote unit are connected wirelessly. The remote unit at the site of the apparatus and a base unit at a manufacturer site are connected through first and second data links for the transmission of a remote output signal from the first data link to the send data link. The base unit receives and responds to the data, which may include reporting back to the remote unit about the condition, providing a price quote for a replacement part and/or providing a notification regarding an automatic shipment of the replacement part. Data acquisition and analysis occur seamlessly with out effort by the customer at a remote location, thereby providing improved service to the customer while ensuring prompt sales through replacement parts to the manufacturer.

For all of the foregoing reasons, Appellants submit that claim 1, and claims 2-9

depending therefrom, are in condition for allowance, the allowance of which is hereby respectfully requested.

B. CLAIMS 10-18 ARE PATENTABLE OVER CARLSMITH ET AL. AND SHACKFORD ET AL.

In contrast to the teachings of Carlsmith, et al and Shackford, et al. alone or in combination, claim 10 recites in part:

> **"sensing a physical parameter associated with said stock preparation apparatus;**
>
> **transmitting an airborne wireless output signal...**(of the parameter);
>
> **receiving the output signal at a remote unit..."**
>
> **transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; and at least one of:**
>
> **analyzing said remote output signal;**
>
> **transmitting a state notification . . .;**
>
> **transmitting a price quote... ; and**
>
> **transmitting a shipment notification..."**

Appellants submit that such an invention is neither taught, disclosed nor suggested by the cited references, alone or in combination, and has distinct advantages thereover.

Carlsmith, et al. discloses a pin mixer configured in such a way as to provide a relief means for limiting build up of fiber on the pin tips. Shackford, et al. discloses a bleaching process. While each discloses a specific apparatus useful in pulp preparation processes, and describes operation thereof, neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a method of monitoring a stock preparation system including sensing a physical parameter of the apparatus and transmitting an air-borne wireless signal of the sensed parameter, as recited in claim 10.

Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches receiving the wireless signal at a remote unit and transmitting a remote signal from a first data link of the remote unit to a second data link at a base unit, as recited in claim 10.

Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches at least one of analyzing the remote signal, transmitting a state notification corresponding to the sensed physical parameter, transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit indicating that a part has been shipped, as recited in claim 10.

The present invention, as recited in originally filed claim 10, directly determines the state of a wear part in a stock preparation apparatus, transmits signals in regard thereto to a base unit remote from the apparatus and allows remote monitoring of the stock preparation apparatus, including automatic responses to the determined condition of the apparatus. The system can then be easily retrofitted on to existing machinery in that the sensor and remote unit are connected wirelessly. Data acquisition and analysis occur seamlessly with out effort by the customer at a remote location, thereby providing improved service to the customer while insuring prompt sales through replacement parts to the manufacturer.

For all of the foregoing reasons, Appellants submit that claim 10, and claims 11-16 depending therefrom, are in condition for allowance, the allowance of which is hereby respectfully requested.

C. CLAIMS 17 AND 18 ARE PATENTABLE OVER CARLSMITH ET AL. AND SHACKFORD ET AL.

In contrast to the teachings of Carlsmith, et al and Shackford, et al. alone or in combination, claim 17 in a manner similar to claim 10 recites in part:

"sensing a physical parameter associated with the wear part;

transmitting an airborne wireless output signal . . . corresponding to said sensed physical parameter;

receiving said wireless output signal at a receiver of a remote unit;"

transmitting a...signal from...said remote unit to...a base unit; and at least one of:

analyzing said remote output signal;

transmitting a state notification . . .;

transmitting a price quote... ; and

transmitting a shipment notification..."

Appellants submit that such an invention is neither taught, disclosed nor suggested by the cited references, alone or in combination, and has distinct advantages thereover.

Carlsmith, et al. discloses a pin mixer configured in such a way as to provide a relief means for limiting build up of fiber on the pin tips. Shackford, et al. discloses a bleaching process. While each discloses a specific apparatus useful in pulp preparation processes, and describes operation thereof, neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a method of monitoring a monitoring a physical parameter of a wear part in a system for making or processing a fiber suspension including sensing a physical parameter of the wear part and transmitting an air-borne wireless signal of the sensed parameter, as recited in claim 17.

Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches receiving the wireless signal at a remote unit and transmitting a remote signal from a first data link of the remote unit to a second data link at a base unit, as recited in claim 17.

Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches at least one of analyzing the remote signal, transmitting a state notification corresponding to the sensed physical parameter, transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit indicating that a part has been shipped, as recited in claim 17.

The present invention, as recited in originally filed claim 17, directly determines the state of a wear part in a stock preparation apparatus, transmits signals in regard thereto to a base unit remote from the apparatus and allows remote monitoring of the stock preparation apparatus, including automatic responses to the determined condition of the apparatus. The system can then be easily retrofitted on to existing machinery in that the sensor and remote unit are connected wirelessly. Data acquisition and analysis occur seamlessly with out effort by the customer at a remote location, thereby providing improved service to the customer while insuring prompt sales through replacement parts to the manufacturer.

For all of the foregoing reasons, Appellants submit that claim 17 along with claim 18 depending therefrom, are in condition for allowance, the allowance of which is hereby respectfully requested.

D. CLAIM 19 IS PATENTABLE OVER CARLSMITH ET AL. AND SHACKFORD ET AL.

In contrast to the teachings of Carlsmith, et al and Shackford, et al. alone or in combination, claim 19 in a manner similar to claim 1 recites in part:

> **"...a sensor . . . configured for sensing a physical parameter associated with said stock preparation apparatus, . . .including a transmitter for transmitting an output signal...;**
>
> **a remote unit including a receiver for receiving said output signal, ...including a first data link for transmitting a remote signal; and**
>
> **a base unit including a second data link...coupled with said first data link for receiving said remote output signal ... for at least one of:**
>
> **analyzing said remote output signal;**
>
> **transmitting a state notification to said remote unit . . .;**
>
> **transmitting a price quote to said remote unit . . .; and**
>
> **transmitting a shipment notification to said remote unit . . .".**

Appellants submit that such an invention is neither taught, disclosed nor suggested by the cited references, alone or in combination, and has distinct advantages thereover.

Carlsmith, et al. discloses a pin mixer configured in such a way as to provide a relief means for limiting build up of fiber on the pin tips. Shackford, et al. discloses a bleaching process. While each discloses a specific apparatus useful in pulp preparation processes, neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a sensor coupled with the stock preparation apparatus configured to sense a physical parameter of the apparatus, the sensor including a transmitter for transmitting an output signal, as recited in claim 19.

Neither Carlsmith, et al., nor Shackford, et al., alone or in combination, teaches a remote unit including a receiver receiving the output signal and a first data link for transmitting a remote output signal, as recited in claim 19.

Neither Carlsmith, et al. nor Shackford, et al. alone or in combination teaches a base unit including a second data link coupled with the first data link and including means for analyzing the remote signal, transmitting a state notification to the remote unit, transmitting a price quote to the remote unit and/or transmitting a shipment notification to the remote unit, as recited in claim 19.

The present invention, as recited in originally filed claim 19, directly determines the state of a wear part in a stock preparation apparatus, transmits signals in regard thereto to a base unit remote from the apparatus and allows remote monitoring of the stock preparation apparatus. The system can then be easily retrofitted on to existing machinery in that the sensor and remote unit are connected wirelessly. The remote unit at the site of the apparatus and a base unit at a manufacturer site are connected through first and second data links for the transmission of a remote output signal from the first data link to the send data link. The base unit receives and

responds to the data, which may include reporting back to the remote unit about the condition, providing a price quote for a replacement part and/or providing a notification regarding an automatic shipment of the replacement part. Data acquisition and analysis occur seamlessly with out effort by the customer at a remote location, thereby providing improved service to the customer while ensuring prompt sales through replacement parts to the manufacturer.

For all of the foregoing reasons, Appellants submit that claim 19 is in condition for allowance, the allowance of which is hereby respectfully requested.

2. CLAIMS 1-19 ARE PATENTABLE OVER CLAIMS 1-37 OF U.S. PATENT NO. 6,267,847 (DOELLE, ET AL.)

Claim 1-19 have been rejected under the judicially created doctrine of double patenting over claims 1-37 of U.S. Patent 6,267,847 (Doelle, et al.).

Doelle, et al. teaches a pulper for a stock preparation system. Pulper 12 includes a housing or drum 24, a plurality of stationary pulping foils 26, a rotatable shaft assembly 28 and a valve 30. Housing 24 includes a fiber inlet 32, water inlets 34 and an outlet 36, and defines an inner chamber 38. Stationary pulping foils 26 are spaced at predetermined intervals along a length of housing 24 (column 3, lines 13-24). Shaft assembly 28 includes a shaft 46, an auger 48 and a plurality of movable pulping foils 50 (column 3, lines 46-47). Auger 48 is positioned relative to fiber inlet 32 to receive the input source of fiber (column 3, lines 54-56). Moveable pulping foils 50 are carried by and extend from shaft 46. Valve 30 is positioned in association with outlet 36 and is selectively moveable toward and away from open end 42 of housing 24. Valve 30 is configured as a conical valve (column 4, lines 21-23).

The claims of the present invention recite a monitoring system (claims 1-9), a method of monitoring a stock preparation system (claims 10-16), a method of monitoring a wear part

(claims 17-18) and a stock preparation monitoring system (claim 19), each as described above with respect to the prior art rejection. The apparatus claims of the present invention (claims 1 and 19) recite a sensor including a transmitter, a remote unit including a receiver and a first data link, and a base unit that includes a second data link. Each recites a means for at least one of analyzing the remote signal, transmitting a state notification, transmitting a price quote and/or transmitting a shipment notification. The method claims of the present invention (claims 10 and 17) recite steps that include sensing a physical parameter, transmitting a signal corresponding to the parameter, receiving the signal at a remote unit and transmitting a signal to a base unit, and at least one of analyzing the remote signal, transmitting a state notification, transmitting a price quote and/or transmitting a shipment notification. It is respectfully submitted that none of these elements recited in the present apparatus claims and none these steps recited in the present method claims are taught by Doelle, et al. The present invention is neither described nor shown in Doelle, et al. and therefore is not and could not have been claimed in Doelle, et al. Therefore, Appellants respectfully submit that the double patenting rejection based on claims 1-37 of Doelle, et al. is improper and should be removed. Removal of the double patenting rejection is respectfully requested.

3. RESPONSE TO EXAMINER'S ARGUMENTS.

In the Final Rejection dated April 19, 2004, the Examiner summarizes aspects of the Carlsmith and Shackford references including various teachings from each regarding measurements that are taken during a pulp treating process. Appellants do not contend, nor do the claims recite that the mere sensing or measuring of pulp or process conditions are novel. As summarized above, the independent claims recite specific structure within a monitoring system (claims 1 and 19) and steps within a method (claims 10 and 17) that go well beyond the mere

detection of a physical parameter or an operating condition. The Examiner has seemingly ignored these limitations of the independent claims, rejecting the claims, in essence, on two references for specific stock preparation devices. Neither reference alone, nor the combination teaches the additional elements of the independent claims, nor are the elements obvious from the combination. The Examiner's reference to motivation for the combination being found in Shackford, et al. in column 3, lines 10-32 is of no significance since the combination of Carlsmith, et al. and Shackford, et al., whether or not suggested, fails to teach the invention. Even if Carlsmith and Shackford can be combined, the combination thereof does not teach the aforementioned elements of the independent claims. While Carlsmith, et al, and Shackford, et al. suggest that processes and equipment should be controlled to optimize performance, neither reference alone, nor the combination thereof teaches or suggests the systems and methods of the present invention in which, for example, a customer and a manufacturer can be linked to monitor the system and apparatus and respond to changes therein, including the possible automatic supply of replacement parts.

With respect to the double patenting rejection, the Examiner states that the subject matter claimed in the instant application is fully disclosed in the patent. This assertion is without support in the Doelle patent. Merely because the patent and the present application each relate to a stock preparation system is meaningless when the present application goes on to describe and claim remote equipment and responses which include analysis and reporting, the transmitting of price quotes and or the shipment and transmission of a notification thereof in response to the sensed data.

The prior art cited merely discloses sensor equipment on stock preparation devices. The use thereof and equipment associated with such use as recited in the present claims and disclosed in the present application simply are not shown or suggested by the prior art.

IX. CONCLUSION

For the foregoing reasons, Appellants submit that claims 1-19 are neither anticipated nor suggested by the cited references, alone or in combination, and are therefore in condition for allowance in their present form. Further, the Appellants submit the subject matter of the appealed claims is not taught by Doelle, et al, and the double patenting rejection is therefore without merit. Accordingly, Appellants respectfully request the Board to reverse the final rejections of the appealed claims.

Respectfully submitted,

Todd T. Taylor
Registration No. 36,945

Attorney for Appellant

TTT5/ar

TAYLOR & AUST, P.C.
142 S. Main Street
P.O. Box 560
Avilla, IN 46710
Telephone: 260-897-3400
Facsimile: 260-897-9300

Enc.: Return postcard

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MA Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: September 16, 2004.

Todd T. Taylor, Reg. No. 36,945
Name of Registered Representative

Signature

September 16, 2004
Date

X. APPENDIX

1. A stock preparation monitoring system, comprising:

a stock preparation apparatus;

a sensor coupled with said stock preparation apparatus and configured for sensing a physical parameter associated with said stock preparation apparatus, said sensor including a wireless transmitter for transmitting an air-borne wireless output signal corresponding to said sensed physical parameter;

a remote unit including a receiver for receiving said wireless output signal, said receiver including a first data link for transmitting a remote output signal corresponding to said wireless output signal; and

a base unit including a second data link at least intermittently coupled with said first data link for receiving said remote output signal, said base unit including means for at least one of:

analyzing said remote output signal;

transmitting a state notification to said remote unit via said second data link and said first data link corresponding to a state of said sensed physical parameter;

transmitting a price quote to said remote unit via said second data link and said first data link; and

transmitting a shipment notification to said remote unit via said second data link and said first data link indicating a part has been shipped.

2. The stock preparation system of claim 1, wherein said stock preparation apparatus includes a wear part, and wherein said wireless output signal corresponds to a wear state of said wear part.

3. The stock preparation system of claim 2, wherein said stock preparation apparatus comprises a screen basket and said wear part comprises a screen within said screen basket.

4. The stock preparation system of claim 3, wherein said screen includes a plurality of holes and said wireless output signal generally corresponds to a profile of said holes.

5. The stock preparation system of claim 4, wherein said sensor comprises an ultrasound transceiver.

6. The stock preparation system of claim 5, wherein said wireless output signal generally corresponds to a size of said holes.

7. The stock preparation system of claim 1, said remote unit including means for at least one of:

analyzing said wireless output signal; and

transmitting a state notification to said base unit via said first data link and said second data link corresponding to a state of said sensed physical parameter.

8. The stock preparation system of claim 1, wherein said base unit includes means for each of said analyzing step and said transmitting steps.

9. The stock preparation system of claim 1, wherein said first data link and said second data link each comprise a modem.

10. A method of monitoring a stock preparation system, comprising the steps of:

providing a stock preparation apparatus;

coupling a sensor with said stock preparation apparatus;

sensing a physical parameter associated with said stock preparation apparatus;

transmitting an air-borne wireless output signal using a wireless transmitter, said wireless output signal corresponding to said sensed physical parameter;

receiving said wireless output signal at a receiver of a remote unit;

transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; and

at least one of:

analyzing said remote output signal;

transmitting a state notification via said second data link and said first data link corresponding to a state of said sensed physical parameter;

transmitting a price quote to said remote unit via said second data link and said first data link; and

transmitting a shipment notification to said remote unit via said second data link and said first data link indicating a part has been shipped.

11. The method of claim 10, wherein said analyzing step is carried out in said base unit.

12. The method of claim 10, wherein said analyzing step is carried out in said remote unit.

13. The method of claim 10, wherein said step of transmitting said state notification comprises transmitting said state notification to said remote unit from said base unit.

14. The method of claim 10, wherein said steps of transmitting said price quote and transmitting said shipment notification are each carried out in said base unit.

15. The method of claim 10, wherein said first data link and said second data link each comprise a modem and said step of transmitting said remote output signal is carried out intermittently.

16. The method of claim 10, wherein said analyzing step is carried out after said step of transmitting said remote output signal.

17. A method of monitoring a physical parameter of a wear part in a system for one of making and processing a fiber suspension, comprising the steps of:

positioning a sensor in association with the wear part;

sensing a physical parameter associated with the wear part;

transmitting an air-borne wireless output signal using a wireless transmitter, said wireless output signal corresponding to said sensed physical parameter;

receiving said wireless output signal at a receiver of a remote unit;

transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; and

at least one of:

analyzing said remote output signal;

transmitting a state notification corresponding to a state of said sensed physical parameter;

transmitting a price quote; and

transmitting a shipment notification.

18. The method of claim 17, wherein said system comprises one of a stock preparation system and a paper-making machine.

19. A stock preparation monitoring system, comprising:

a stock preparation apparatus;

a sensor coupled with said stock preparation apparatus and configured for sensing a physical parameter associated with said stock preparation apparatus, said sensor including a transmitter for transmitting an output signal corresponding to said sensed physical parameter;

a remote unit including a receiver for receiving said output signal, said receiver including a first data link for transmitting a remote output signal corresponding to said output signal; and

a base unit including a second data link at least intermittently coupled with said first data link for receiving said remote output signal, said base unit including means for at least one of:

analyzing said remote output signal;

transmitting a state notification to said remote unit via said second data link and said first data link corresponding to a state of said sensed physical parameter;

transmitting a price quote to said remote unit via said second data link and said first data link; and

transmitting a shipment notification to said remote unit via said second data link and said first data link indicating a part has been shipped.